

REMARKS

The Applicants have carefully considered the Examiner's comments in the Final Office Action dated March 17, 2006. Of the 20 claims currently pending, Claims 1-16 and 25-27 stand rejected and Claim 28 is objected to in the Final Office Action. Applicants respectfully request reconsideration by the Examiner.

In paragraph 4 of the Final Office Action, Claims 1-5, 16, 25 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Lounsberry et al.* (US 4,573,185) in view of *Love et al.* (US Patent 4,109,058). Applicants respectfully traverse the rejection.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In Re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). Applicants agree with the Examiner's statement, "Lounsberry fails to teach graded CTE material layer." However, while the Love reference teaches a graded surface layer, it fails to teach or suggest a graded CTE material layer as required by the claims. Specifically, the Love reference states on line 47 through 58 in column 2:

"Recently, anodes have been developed which use a graded surface layer. The first outer surface layer on which the electron beam impinges is a tungsten-rhenium alloy. Below the first layer is a second layer which comprises tungsten-rhenium and molybdenum. The content of molybdenum in the second layer diminishes in the direction of the first layer and, conversely, the content of rhenium diminishes in the direction of the substrate which is essentially molybdenum or a molybdenum-tungsten alloy. Thus, *no molybdenum from the substrate or the surface layer is exposed to direct electron impact.*"(Emphasis added).

Accordingly, the Love reference teaches a graded layer to diminish the rhenium in one direction while diminishing the molybdenum in the opposite layer direction in order to avoid direct electron impact with the molybdenum layer. While the Love reference makes reference to a graded layer, however, the Love reference does not teach or suggest a graded CTE material layer as is required by the claims. Applicants therefore submit that without using the claimed invention as a template for modifying the prior art, the Love reference cannot support the obviousness rejections. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed. Cir. 1984) ("It is impermissible to use the patent itself as the source of suggestion."); *Ex Parte*

Levengood, 28 USPQ2d 1300-1301, 1302 (BPAI 1993) ("That which is within the capabilities of one skilled in the art is not synonymous with obviousness.").

Further, the Examiner has failed to provide a suggestion or motivation for combining the references. The Lounsberry reference discloses an X-ray anode having a tungsten focal track placed on a graphite substrate as to reduce off focal spot radiation while maintaining a fixed focal spot size, while, the Love reference discloses an X-ray anode having a ternary alloy sintered on a refractory metal body to provide improved resistance to surface layer degradation. Accordingly, the Final Office Action has failed to provide a suggestion or motivation to combine the references. Moreover, even if the references are combined there must be a reasonable expectation of success. Applicants believe that the process to make the anode in the Love reference would destroy the graphite substrate disclosed in the Lounsberry reference. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn as *Lounsberry et al.* in view of *Love et al.* fail to teach or suggest each and every element of each claim.

Accordingly, Independent Claims 1, 25 and 27, including dependent Claims 2-16, 26 and 28 are believed to be allowable.

In paragraphs 5, 6, 7 and 8 of the Final Office Action, the claims were rejected over Truszkowska, Horner and or Lewis in view of the Love reference for the same reason as given for paragraph 4. Accordingly, Applicants respectfully request that the rejection under the cited references for paragraphs 5, 6, 7 and 8 in view of Love be withdrawn as they fail to teach or suggest each and every element as required by the claims.

In paragraph 9 of the Final Office Action, Applicants thank the Examiner for indicating that Claim 28 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Accordingly, in view of the foregoing Remarks, Applicants submit that Claims 1-16 and 25-28 are allowable and in a proper condition for allowance. A Notice of Allowance indicating the same is therefore earnestly solicited. The Examiner is invited to telephone the Applicants' undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Please charge any fees required in the filing of this response to Deposit Account 07-0845.

Respectfully submitted,

ARTZ & ARTZ, P.C.

A handwritten signature in black ink, appearing to read 'R. Scott Vincent', written over a horizontal line.

R. Scott Vincent (Reg. No. 55,771)
28333 Telegraph Road, Suite 250
Southfield, MI 48034
(248) 223-9500

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